

5 Institutions as Mobilizing Networks: (Or, “I Hate the Institution—But I Love What It Did for Me”)

Institution, n Origin: 1350–1400; ME<L institutiōn- (s. of institūtiō). 1. an organization, establishment, foundation, society, or the like, devoted to the promotion of a particular cause or program, esp. one of a public, educational, or charitable character. 2. the building devoted to such work. 3. a public or private place for the care or confinement of inmates, esp. mental patients or other disabled or handicapped persons. 4. Sociology: a well-established and structured pattern of behavior or of relationships that is accepted as a fundamental part of a culture, as marriage: the institution of the family. 5. any established law, custom, etc. 6. any familiar, long-established person, thing, or practice; fixture. 7. the act of instituting or setting up; establishment: the institution of laws.

—*Random House Unabridged Dictionary*, © Random House, Inc., 2006

Institution-Building

In the standard *Random House* dictionary entry for *institution*, the word *established* (or *establishment*) occurs five times. Against innovation, virtuality, and the future, the institution stands as an anchor, a remnant that symbolizes the solidity of the past persisting through time and change into the present (*well-established, long-established*).

Yet in setting to work on the future of learning institutions in a digital age, an interesting challenge emerged. Institutions by conception are solid, slow moving, and even slower to change. They hold their members within their defined and refining boundaries, fashioning and reproducing habits, activities, and ways of being and doing. Connie Yowell of the MacArthur Foundation, the division director responsible for the Digital Media and Learning Initiative, wondered what would happen if a succinct definition of *institution* were developed, one more agile, placing less emphasis on what was established and more on the potentialities, on the ways that institutions could and do foster and not simply impede or provide obstacles to innovation.¹

This is an intriguing concept. There is a familiar narrative of personal institutional history that goes something like: “I hated _____, but in retrospect I learned from it.” That blank might be filled in with anything: a Jesuit education, prep school, the military, any strong institutional enforcer of discipline that one survived but, somehow, against odds, learned from. Too often, this compensatory retrospection is tinged with nostalgia and conservatism—as if salvaging something from that despised past made the institution worth preserving.

Conserving institutional traditions for their own sake is not this chapter’s aim. Instead, it explores the way change seeps through and gradually changes institutions, the way individuals and collectives can make institutional change, and also the way groups of individuals within institutions can sometimes become agents of change even within and around and, sometimes, supported by the institution that may name its own mission in different ways. Would a more agile comprehension of institutions promote innovation?

If, in fact, institutions change and adapt to changing environments as well as maintain their establishment as seemingly

impervious to change, what could be gained by emphasizing the disruptions rather than the continuities? Instead of thinking conventionally of the medieval remnants in the contemporary institutions of higher education, what might emerge were one to think in terms of the range of options that learning institutions offer today? These range across research universities, liberal arts colleges, community colleges, distance-learning programs, global learning programs, universities in prisons or mental institutions, community-outreach and in-reach programs, Wikiversity, and whole campuses in Second Life. If there are structural features of the university that remain unchanged, other aspects often tend to be illegible if not invisible, incomprehensible if not threatening. Focusing on the permanence of institutions offers some conceptual and social gains, but would thinking of institutions in terms of what they change and how they change provide other forms of inspiration? It is an intriguing challenge.

In response to this challenge, the following definition is proposed:

Institutions are mobilizing networks.

This definition is deliberately provocative. The intention in proposing it is to see the effects of injecting a verb—to *mobilize*—into the traditional solidity (establishment) of *institution*. At the same time, holding on to something positive in the notion of an institution undermines a naïve, if utopian, fantasy of the Internet as a noninstitutional place of free-flowing choice.² Indeed, drawing here upon Michel Foucault, even the most powerfully repressive institutions (monarchies, prisons, the military, and so forth) themselves admit of both determination and choice, constraint and flow, and sites of hierarchy and resistance. *And networks do as well.*

This book's definition of *institution* is as concise as that of Avner Greif's magisterial yet quite different definition of institutions as "equilibria of rules, norms, and beliefs."³ His definition arises from economic game theory. While appreciating Greif's metaphor of constant retuning, adjudicating, counterposing, and balancing, switching to the more active and agentive metaphor of "mobilizing" is preferable. Networks need mobilizing—they certainly neither occur nor can be sustained naturally, of their own accord, without effort—and, in turn, they mobilize the interactive to effective purpose or ends.

This book uses *networks* to gesture toward the complex, multiple, sometimes self-generating and sometimes contradictory connections, linkages, and flows that occur in all institutions, not to signal egalitarianism (i.e., networks are *not* purely or simply egalitarian).

Numerous scholars (at least as far back as Plato's exegesis of the state and justice in the *Republic*) have argued that institutional structures that seem permeable in their delineations as well as institutions that appear to be draconian and powerfully linear in their organization and administration all admit and (sometimes inadvertently) foster counter-forces and counter-tendencies. Yet, interestingly, historical definitions of *institution* have tended to privilege the foundational, static, formal, and regulatory aspects rather than the human flows within, into, and out of institutions.

This book's modification of classic definitions of *institution* (including rational choice theory definitions) is intended to elicit discussion concerning the differences between traditional and peer-to-peer or virtual institutions. What would it mean to start with a definition that emphasized social networks and the processes of creating those networks? In any new definition, something is gained and something is lost.

This book's definition deliberately builds upon and pushes at a classic definition of institution such as that offered by political scientist Robert Keohane, of "persistent and connected sets of rules (formal and informal) that, along with norms and beliefs, prescribe behavioral roles, constrain activity, and shape expectations."⁴ Our intent is to help rethink the institution in terms of agency and movement as a way of making visible continuities and discontinuities between traditional and virtual institutions. The definition also helps us find points between the poles of organization and chaos—a way of thinking in *institutional terms* of what Howard Rheingold calls "smart mobs."⁵

An elaboration of the working definition of *institution* as a *mobilizing network* is provided below. A dozen subject-matter experts in as many fields offered insights, feedback, and exceptions that interject cautions (and terminologies) from various disciplinary perspectives, and that make clear that institutions, in and of themselves, are not intrinsically good or bad.⁶ Their utility is a function of what they enable or disable and make possible or restrict. The definition is intended to apply to both traditional and peer-to-peer institutions.⁷

Institution: A Working Definition

Institutions are mobilizing networks. They aggregate, coordinate, disperse, balance, and adjudicate complex flows of resources.

Institutions are also social, political, and economic structures prompting a culture of their own. They embody protocols of governance and varying degrees of control over their members. Institutions validate and impose norms, practices, and beliefs, seeking to ensure orderly interchange through normative interactions. However, intra-institutional conflict and complexity are not always susceptible to being managed by such norms.

Institutions sometimes disseminate products to a larger public. Institutional distribution of goods may be prompted and promoted for reasons of profit, influence, policy, institutional self-perpetuation and power, or the public good.

Institutions may occupy a primary site and exercise jurisdiction over constituents. Institutional sites may be concrete or virtual, and jurisdiction may be legal or social and ideological.

An institution is differentiated from other looser forms of affiliation by duration. Institutions are expected to include mechanisms for continuity over time, often seeking to provide an archive or repository of their own collective processes and history.

This working definition has been especially useful in thinking through the full implications of what a peer-to-peer institution might look like. Of key importance is its motivational premise pointing to the institution's role as a mobilizing network. In building the field of digital media and learning, for example, one must consider what it would take to form the kind of institutional base that will be responsible to its members in its role as a purveyor of cultural norms and protocols for wise decision-making across a distributed network.

An institutional base would also be a responsive builder of a common language and a set of creative translation functions capable nevertheless of being modified, riffed upon, and improvisationally put to practice. This base would also need to be an arbiter of social practices, an honest broker of financial resources, a resource for credentialing and reputation, and a repository or an archive of its own practices—while maintaining its core innovative function as a mobilizing network.

In other words, corporatizing the institution or even reverting to a conventional institutional model subverts the self-organizing operations of the field—those that are the most like the Linux model of self-motivated, open access, self-sourced,

and self-resourced collaboration and creativity or the industrious and even playful collaborative operations that Yochai Benkler ascribes to Coase's penguin.⁸ These kinds of peer-to-peer institutions are what promise to be most responsive to issues of innovative pedagogy. They are also most suited to a field whose goal it is to rethink the future of institutions for young and older people alike, teachers and learners, often the same person—whether schools and colleges (the traditional learning institutions) or an array of ancillary sites where learning also happens. These sites include civic centers, community centers, libraries, museums, after-school programs, and even playgrounds and coffee houses.

Although this book's focus has been primarily on higher education, it is important to underscore that learning, even within the grounds of the academy, does not happen only in the classroom or lab (or, indeed, within the walls, literally, of formal educational institutions). Peer-to-peer learning might happen as much in the social space on campus as in the classroom. Indeed, given the shape of the library in the digital age, the blurring of intellectual and social spaces is becoming increasingly important, with libraries often serving as hosting sites for an array of online learning. Thus, libraries as digital catalysts have manifested, in the simplest way, through wireless affordance as well as in more innovative and activist ways by becoming, on many campuses, the catalyst for innovative uses of technology for pedagogy, from creating digital archives to discussion boards or nodes to sites for collaborative virtual invention. The point is that, even within conventional institutions, there are a variety of other supporting sites of mobilization, and many of those have multiple (and sometimes unexpected) functions. The library-as-social-space plays as much an institutional role as the library-as-information source.

There are many additional examples bearing out the fruits of learning institutions as mobilizing networks. One exemplary model is the Urban Education Institute, part of the Chicago public school system located in Hyde Park and the University of Chicago (figure 5.1). The Institute sponsors four charter schools and offers a robust example of schooling for the future, a mobilizing network of the most imaginative sort. It serves as a community center, an after-school program, a teacher training and support facility, a meeting place for teachers and parents, a resource facility and library, a recording studio and “thinkering” space for local youth, an art gallery exhibiting many of the inventive products designed and produced by the children and instructional leaders, as well as a café and gathering space for local residents. It offers facilities and opportunities not otherwise available, bringing into creative play youth who would otherwise less likely interact to productive learning purpose, composing music and lyrics, designing board and video games, acquiring on-camera interview skills as they learn video production, elaborating complex social skills as well as fostering insight and capability in community and broader urban political knowledge ranging from the local community level to national presidential politics. Funded in part by the MacArthur Foundation Digital Media and Learning Initiative, it is a site also for teachers in training to observe and acquire experience in networked and networking learning practices as well as for program officers of the Foundation to extrapolate lessons learned from this mobilizing network in order to apply them to other locations.

While the Urban Education Institute offers a compelling example for how mobilizing learning networks as institutional sites are put in play, it is far from the only example of the complex relations between teachers, community organizers, uni-

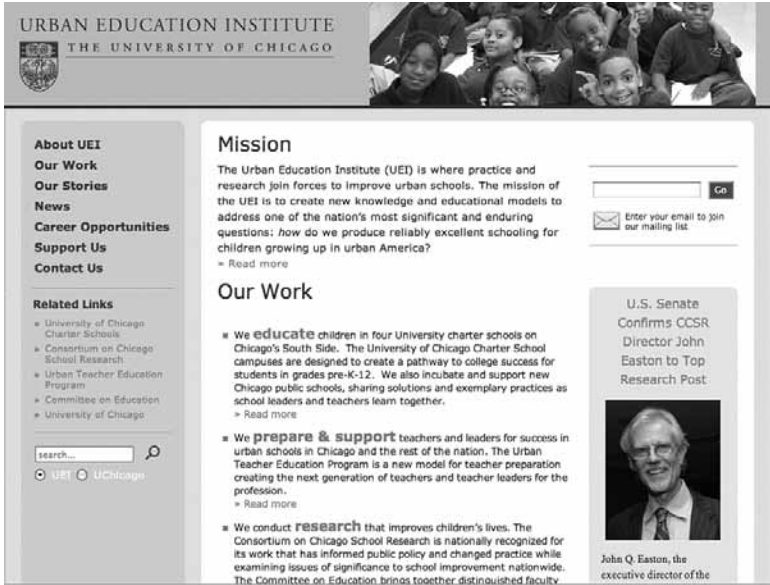


Figure 5.1 Screenshot of the home page of the Urban Education Institute (<http://uei.uchicago.edu/index.shtml>, accessed July 5, 2009).

versity members, youth, family, and funding agency. Another good example of such a complex institutional partnership would be the Sustainable South Bronx project in New York City. This is a community network, drawing on local residents and youth, to mobilize both to learn and do something about the considerable environmental challenges facing residents of the South Bronx. In creating the toolset to collect and disseminate information, to mobilize politically around these counterknowledges, to design and build environmentally conscious tools to address issues of sustainable environmental practice, the Sustainable

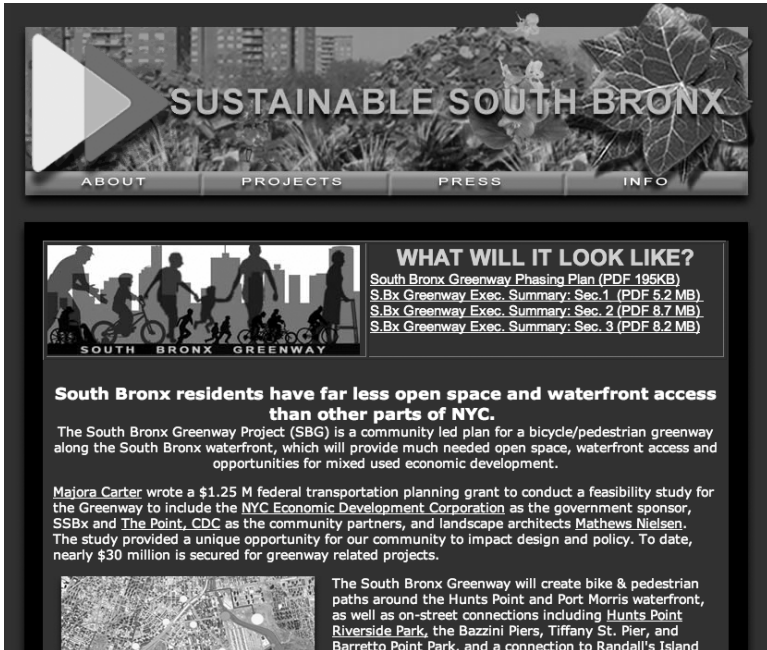


Figure 5.2

Screenshot of the Sustainable South Bronx project (<http://www.ssbx.org/greenway.html>, accessed July 5, 2009).

South Bronx project offers a good example of how mobilizing learning networks as institutional sites work (see figure 5.2).

Waag Society (<http://www.waag.org>), located in the historic building at the center of Amsterdam, is dedicated to experimentation in and development of new technologies for healthcare, education, and networked art and culture (figure 5.3). An independent nonprofit, the Waag Society partners with ordinary people, corporations, schools, teachers and students, and univer-



Figure 5.3

Screenshot of the home page for the Waag Society (<http://www.waag.org>, accessed July 5, 2009).

sities to develop innovative products, such as applications enabling those with demanding physical or mental challenges to express themselves, communicate, and make their own choices to sustain their independent living possibilities; mobile learning games to explore the history of the cities, whether medieval Amsterdam or “New Amsterdam” (Manhattan); digital storyboards that enable the elderly to connect with youth through imaginative photographic narratives recounting lived experiences and memory; or a software application to develop interactive symbol-based communication and educational materials.

Increasingly, museums are turning to digital media to provide learning tools connecting the public and, in particular, the young public to the learning possibilities provided by these institutional sites. This is particularly so for science and technology museums, though far from limited to them. Thus, the Hayden planetarium of New York’s Museum of Natural History has developed a series of “educator’s activities” to provide

students at all levels with access to astronomical data sets from their Digital Universe database (figure 5.4). When combined with Microsoft's recently released WorldWide Telescope (<http://www.worldwidetelescope.org>), educators, researchers, and self-learners are provided access to a powerful tool—a “virtual telescope” linked to real-time data provided by major observatories around the world—operating off their personal computers to explore the astronomical universe.⁹ In these ways, traditional, conventional, and largely static institutions increasingly become mobilizing networks, engaging with schools, community groups, corporations, nonprofits, and individuals.

Even corporations, nongovernmental organizations, and workplaces in general can amount to mobilizing networks. They, too, can and do serve as learning institutions in various ways. They train and retrain those who work for them; they run internships and participate in service learning programs; and they occasionally offer learning possibilities for their clients and consumers. Consider Google, a corporation that offers learning possibilities that range from the traditional to the genuinely novel. Whatever one thinks about the drive to corporate dominance, and there is much to be concerned about, Google offers today what is probably the most compelling gateway to the most extraordinary range of information. It enables—*mobilizes*—the possibility of repeatedly retooling and resourcing production possibilities around the most open-ended informational access and circulation currently available to human beings on a mass and user-friendly scale. The Google Book Search program, in conjunction with an expanding group of major university and public libraries, seeks to digitize in searchable and ultimately publicly accessible form the full text of all published books in the libraries' collections. Google would like to offer a gateway to learning, dramatically expanding access to



Figure 5.4
 Screenshot of Hayden Planetarium’s Digital Universe Atlas (<http://www.haydenplanetarium.org/universe/products>, accessed July 5, 2009).

information, if not itself offering criteria for distinguishing compelling from questionable sources. Its mobilizing capacity and promise are borne out by the fact that its brand name has become a widely invoked verb, even sometime imperative: *Googling*, *to Google*, or just *Google (it)*! This is so much the case that we now have the reverse formation, the fearful version, as in what Siva Vaidhyanathan calls “The Googlization of Everything.”¹⁰

In all of these institutional instances, a form of learning radiates outward from traditional institutions and inward from other less-usual kinds, mobilizing and invigorating both in such creative ways that it is difficult to define the borders of one or another. Mobilizing learning institutions concerns eradicating some borders, manifesting others, and in all ways creating energies and interdependencies whereby learning is integrated into all aspects, operations, and active members of a larger community. Indeed, mobilizing institutions mobilizes collective activity and activates inspiring and productive resources and social relations.

There is another point here as well. The back-and-forth between the traditional or stable institutional role and the mobilizing role is every bit as complex and shifting as the relationship described for the cotaught, bicoastal, biuniversity FLIDA course described in chapter 4. And, viewed this way, almost every educational institution has, within it and in its relationship to the community beyond, some mobilizing and some (literally) immobilizing aspects. For higher education, the increasingly prominent role of interdisciplinary centers is one example of mobilizing within institutions. The center structure often allows for reaching across, through, and around traditional departments and even schools in order to focus on some specific topic, problem, or new swath through multidisciplinary terrains. Often, the center exists not within one institution but across multiple institutions that share a similar mission and, by the creation of a center, can broker faculty strengths, equipment, libraries, and other human and material resources.

What then of learning institutions as mobilizing networks in higher education? Driven by faculty and, to some extent, student interest and demand, more and more universities are

creating dynamic centers and institutes cutting across disciplines and the institution as a whole, sometimes drawing together into interactive engagement universities across cities, regions, and countries. Building on digital humanities laboratories founded in the early 1990s such as IATH at the University of Virginia (<http://www.iath.virginia.edu>) or MITH at the University of Maryland (<http://www.mith2.umd.edu>) and on digital repositories such as PERSEUS at Tufts University (<http://www.perseus.tufts.edu>) or the Electronic Cultural Atlas Initiative (<http://www.ecai.org>), which started at the University of California at Berkeley, a newer generation of dynamic learning and research facilities has emerged, drawing on state-of-the-art high-performance computing.

At the University of California at Los Angeles, the Experiential Technologies Center (ETC) (<http://www.etc.ucla.edu>) creates three-dimensional models across a wide range of disciplines, including architecture, the performing arts, classics, archaeology, foreign language studies, and education. The Center is best known for its innovative work in creating compelling three-dimensional representations of historical sites around the world. Working closely with the University of California at Los Angeles's Center for Digital Humanities (<http://www.humnet.ucla.edu/itc/resources/index.html>), ETC has been widely used by scholars and students to explore such diverse topics as the structure of the human heart, the architectural and civic formation of the Roman Forum, medieval cities in Europe, or early modern cities in the Caribbean. The Pittsburgh Science of Learning Center (<http://www.learnlab.org>), run jointly by the University of Pittsburgh and Carnegie Mellon University, recreates learning environments in a laboratory setting so that students and researchers can examine the most effective digital learning instruments and practices. In Sweden, the University

of Umea's HUMlab (<http://www.humlab.umu.se/about>) creates new institutional formations and dynamic cross-disciplinary partnerships to address human informatics, digital culture and art, and shifting conceptions of performance at the interface of the humanities, cultural studies, and information and media technology. It enables students and scholars to explore whether culture and history can be simulated, what can be learned from the visualization of large quantities of data, how modes of narration are altered by computer games, and more generally how modes of communication are transformed by new media.¹¹

These are examples—there are many others—of scholars and students, often in partnership with community and corporate interests, mobilizing to develop or leverage existing technological innovation for the purpose of enhancing learning within and beyond the institutional boundaries.

At the same time, the complex bureaucracies that are contemporary universities, including increasing defensiveness and fear of litigation that give rise to procedures that can certainly be immobilizing, should be seen as one of the least savory aspects of modern learning institutions. The distribution of grant funding “indirect costs” is but one of the bureaucratized procedures universities use to systemize redistribution of resources in such a complex and competitive way that, in some instances, failure—or immobility writ large—is the result.

The tensions between the mobile and mobilizing tendencies and the tendencies of institutions toward reification and stasis are, perhaps, a hallmark of the traditional institution of higher education. There is another issue. If one is trying to mobilize effectively on behalf of a new participatory learning practice, if one requires crossing not only disciplinary boundaries but

institutional ones, too, where does one begin? How are effective learning networks to be created that reach out to, across, and through all of these different functions and institutional manifestations?

Analogously, is there a way to sustain a learning network without creating fixed rules of organization that, inevitably, replicate exactly the institutional silos one is seeking to diminish as part of the process of reenvisioning learning? The standard organizational model of large academic associations such as the Modern Language Association or the Organization of American Historians has limited the reach of social networking to the one-on-one interpersonal or the anonymity of mass mailings. This seems in its lack of agility and relative immobility to run counter to the potentialities of Web 2.0 social networking and aggregating. What other models might there be?

What we see is a form of interactive learning that radiates outward from traditional educational institutions and inward from other kinds of learning institutions, mobilizing and invigorating both in such creative ways that it is difficult to define the borders of one or another. Mobilizing learning institutions are precisely about eradicating some borders, (re)making others, and in all ways creating energies and interdependencies whereby learning is integrated into all aspects and operations of the multiple lives of larger communities.

The concept of *emergence* is key to thinking through the future of learning institutions.¹² Emergence is the complex process of pattern formation that begins to take shape and evolve as a result of continuous interactions across and among more basic constituent parts or behaviors.¹³ Emergence happens constantly in education. New fields emerge. Marginal or peripheral

intellectual activity becomes central. Central concerns, likewise, become peripheral. Whole fields change in their focus, methodology, and emphasis. Concomitantly, institutions change as well, sometimes more gradually than one would like, but they do change.

Are there models or principles for how one creates emergent institutions for an emergent field? Contention and resistance are familiar models for field-transformation. And yet, at least as often, new fields emerge in ways that are taken up by and even substantively change the identities of the institution itself. So are there ways that learning institutions can be more innovative and aggressive in support of this latter process while still confident enough to be open to the innovative developments in field (trans)formation that may be a product of the former?

Over a decade ago, John Seely Brown and Paul Duguid suggested that the university of the future might not even look like a university. They proposed that higher education might itself become something more flexible, flowing, integrated, networked, distributed, inventive—something that “breaks down the monolith” of university credentialing, training, and (in all senses) disciplinary field-definition.¹⁴ If one looked at universities from on high, one indeed would see many tentacles reaching out in complex new collaborative directions that seem to underscore the validity of Brown and Duguid’s prediction. And yet there are other features of universities that resemble nineteenth-century Germany or medieval England far more than they do the networked, knowledge-sharing, global open learning models of the Net Age. This is not to say that the latter are all good, the former all bad. But to ignore the deep changes in conditions and structures of learning—in what and how learning takes

place among and across and beyond learners today, when we learn and with and through whom, by what means and with what interest(s)—is to lose one of the most generative educational *opportunities* in recent history.

Institutions are mobilizing networks.

At the same time, we must use our networks to mobilize our institutions. That is the interactive imperative of the digital age.

